Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently amended): A zinc or zinc alloy electroplating bath comprising:

zinc ions and a brightening agent, the brightening agent comprising at least one polyamine or a mixture of polyamines, the at least one polyamine or mixture of polyamines including a first repeating unit that has the general formula:

$$\begin{array}{c|c}
R_1 \\
\hline
 N_{+}^{+} \\
R_2
\end{array}$$

$$\begin{array}{c|c}
A_1 \\
\hline
 N_{+}^{-} \\
 (CH_2)_x - N_{+}^{+} \\
\hline
 N_{+}^{-} \\
 (CH_2)_x - N_{+}^{+} \\
 R_4
\end{array}$$

$$\begin{array}{c|c}
R_3 \\
\hline
 (CH_2)_y - N_{+}^{+} \\
\hline
 (CH_2)_y - N_{+$$

and a second repeating unit selected from the group consisting of that has the general formula:

and combinations thereof;

where Δ_1 is O, N, or S; $\underline{A_2}$ is O, N, or S, and $\underline{A_2} \neq \underline{A_1}$; x is an integer from 2 to 6; y is an integer from 1 to 6; z is an integer from 1 to 6; R₁, R₂, R₃, and R₄, which is the same or different, is methyl, ethyl, isopropyl, n-propyl, hydroxyethyl, or

-CH₂CH₂(OCH₂CH₂)_mOH; m is a number between 0-6; R_5 represents a group of atoms necessary to complete a heterocyclic compound having a five or six membered ring containing at least two nitrogen atoms; and R_6 is nothing or an alkyl group, wherein the first repeating unit and the second repeating unit are in the same polymer chain.

Claim 2 (Original): The zinc or zinc alloy electroplating bath of claim 1, the first repeating unit having the following formula:

$$\begin{array}{c|c} CH_3 & CH_3 \\ \hline -N^{+} (CH_2)_3 - N & C \\ \hline CH_3 & CH_2 \\ \hline CH_3 & CH_2 \\ \hline CH_3 & CH_3 \\ \end{array}$$

Claim 3 (Withdrawn): The zinc or zinc alloy plating bath of claim 1, the brightening agent comprising a mixture of polyamines, the mixture of polyamines including a first polyamine of the general formula:

and a second polyamine of the general formula:

Claim 4 (Withdrawn): The zinc or zinc alloy plating bath of claim 1, the brightening agent comprising a mixture of polyamines, the mixture of polyamines including a first polyamine of the general formula:

and a second polyamine of the general formula:

Claim 5 (Cancelled):

Claim 6 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 1, the polyamine having the following general formula:

where R₇ is an alkylene group.

Claim 7 (Original): The zinc or zinc alloy electroplating bath of claim 1, the polyamine having the following general formula:

where v is an integer greater than 1.

Claim 8 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 1, the polyamine having the following general formula:

Claim 9 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 1, the polyamine having the following general formula:

Claim 10 (Withdrawn): A zinc or zinc alloy electroplating bath comprising:

zinc ions and a brightening agent, the brightening agent comprising at least one polyamine or a mixture of polyamines, the at least one polyamine or mixture of polyamines including a first repeating unit that has the general formula:

$$\begin{array}{c|c} CH_3 & CH_3 \\ \hline -N_+^+ (CH_2)_3 - N_- & CH_2)_3 - N_+^+ (CH_2)_3 - N_+ & CH_3 \\ CH_3 & CH_3 & CH_3 \end{array}$$

and a second repeating unit selected from the group consisting of:

and combinations thereof;

where Δ_1 is O, N, or S; Δ_2 is O, N, or S, and $\Delta_2 \neq \Delta_1$; x is an integer from 2 to 6; y is an integer from 1 to 6; z is an integer from 1 to 6; R₁, R₂, R₃, and R₄, which is the same or different, is methyl, ethyl, isopropyl, n-propyl, hydroxyethyl, or $-CH_2CH_2(OCH_2CH_2)_mOH$; m is a number between 0-6; R₅ represents a group of atoms necessary to complete a heterocyclic compound having a five or six membered ring containing at least two nitrogen atoms, and R₆ is nothing or an alkyl

group, wherein the first repeating unit and the second repeating unit are in the same polymer chain.

Claim 11 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the second repeating unit comprising:

$$\begin{array}{c|c} CH_3 & CH_3 \\ \hline -N^{+} (CH_2)_3 - N & C \\ CH_3 & CH_2 - CH_2 - CH_2 - CH_2 - CH_3 \\ CH_3 & CH_3 & CH_3 - CH_3 - CH_2 - CH_3 \\ CH_3 & CH_3 & CH_3 - CH_3 -$$

Claim 12 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the second repeating unit comprising:

Claim 13 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the second repeating unit comprising:

Claim 14 (Withdrawn): The zinc or zinc alloy plating bath of claim 10, the brightening agent comprising a mixture of polyamines, the mixture of polyamines including a first polyamine of the general formula:

and a second polyamine selected from the group consisting of:

Claim 15 (Cancelled)

Claim 16 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the polyamine having the following general formula:

$$* \begin{bmatrix} \mathsf{C}\mathsf{H}_3 & \mathsf{C}\mathsf{H}_3 & \mathsf{C}\mathsf{H}_3 & \mathsf{C}\mathsf{H}_3 \\ \mathsf{I} + \mathsf{N} + \mathsf{C}\mathsf{C}\mathsf{H}_2\mathsf{C}_3 - \mathsf{N} + \mathsf{C} + \mathsf{C}\mathsf{C}_3 & \mathsf{C}\mathsf{H}_3 \\ \mathsf{I} + \mathsf{C}\mathsf{C} + \mathsf{C}\mathsf{C}_3 - \mathsf{N} + \mathsf{C} + \mathsf{C}\mathsf{C}_2\mathsf{C}_3 - \mathsf{N} + \mathsf{C}_3 \\ \mathsf{C}\mathsf{C} + \mathsf{C}\mathsf{C}_3 & \mathsf{C}\mathsf{C}_3 - \mathsf{C}_3 + \mathsf{C}_3 \\ \mathsf{C}\mathsf{C} + \mathsf{C}\mathsf{C}_3 & \mathsf{C}\mathsf{C}_3 \\ \mathsf{C}\mathsf{C} + \mathsf{C}_3 & \mathsf{C}\mathsf{C}_3 \end{bmatrix} * \\ \mathsf{C} \mathsf{C} \mathsf{C} \mathsf{C} \mathsf{C} \mathsf{C}_2 \mathsf{C}_3 + \mathsf{C}_3 + \mathsf{C}_3 + \mathsf{C}_3 + \mathsf{C}_3 + \mathsf{C}_3 + \mathsf{C}_3 \\ \mathsf{C} \mathsf{C} + \mathsf{C}_3 \\ \mathsf{C} \mathsf{C} \mathsf{C}_3 + \mathsf{C}_3 \\ \mathsf{C} \mathsf{C}_3 + \mathsf{C}$$

where R₇ is an alkylene group.

Claim 17 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the polyamine having the following general formula:

where v is an integer greater than 1.

Claim 18 (Withdrawn): The zinc or zinc alloy electroplating bath of claim 10, the polyamine having the following general formula:

Claim 19 (Withdrawn): A brightening agent for an alkaline zinc or zinc alloy electroplating bath, the brightening agent comprising a copolymer of a first monomer having the following formula:

$$R_1$$
 N C N C N C N C N C N C N R_3 R_4

and a second monomer comprising at least two of the following compounds selected from the group consisting of:

$$\begin{array}{c}
R_1 \\
R_2
\end{array}$$

$$\begin{array}{c}
A_2 \\
R_3
\end{array}$$

$$\begin{array}{c}
R_4
\end{array}$$

$$\begin{array}{c}
R_5
\end{array}$$

$$\begin{array}{c}
R_6
\end{array}$$

$$\begin{array}{c}
R_7
\end{array}$$

$$\begin{array}{c}
R_7
\end{array}$$

$$\begin{array}{c}
X_2
\end{array}$$

$$\begin{array}{c}
R_6
\end{array}$$

$$\begin{array}{c}
R_7
\end{array}$$

$$\begin{array}{c}
R_8
\end{array}$$

$$\begin{array}{c}
X_3
\end{array}$$

$$\begin{array}{c}
R_8
\end{array}$$

$$\begin{array}{c}
X_3
\end{array}$$

where Δ_1 is O, N, or S; Δ_2 is O, N, or S, and $\Delta_2 \neq \Delta_1$; x is an integer from 2 to 6; R₁, R₂, R₃, and R₄, which is the same or different, is methyl, ethyl, isopropyl, n-propyl, hydroxyethyl, or -CH₂CH₂(OCH₂CH₂)_mOH; m is a number between 0-6; R₅ represents a group of atoms necessary to complete a heterocyclic compound having

a five or six membered ring containing at least two nitrogen atoms; R_6 is nothing or an alkyl group; R_7 and R_8 , which may be the same or different, is an alkylene group; and X_1 , X_2 , and X_3 , which is the same or different, is a halogen.